

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 1955 P 133	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2004/039361	International filing date (day/month/year) 22/11/2004	(Earliest) Priority Date (day/month/year) 25/11/2003
Applicant NUVERA FUEL CELLS, INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

☐ as suggested by the applicant.

☒ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/039361

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F23N5/10 F23N1/02 F23N5/00 F23N5/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F23N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 380 705 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 8 August 1990 (1990-08-08) page 5, line 9 - page 6, line 22 page 9, line 17 - line 21 page 14, line 8 - page 16, line 2 page 21, line 23 - page 23, line 13 -----	1-23
Y	US 2002/081470 A1 (HANAI SATOSHI ET AL) 27 June 2002 (2002-06-27) paragraphs '0010!', '0011!', '0016!', '0043! -----	1-23
Y	EP 0 697 564 A (ABB RESEARCH LTD; LAMTEC MESS- UND REGELTECHNIK FUER FEUERUNGEN GMBH &) 21 February 1996 (1996-02-21) column 1, line 7 - line 26 ----- -/--	8, 11, 16, 21

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *S* document member of the same patent family

Date of the actual completion of the international search

3 May 2005

Date of mailing of the international search report

11/05/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Mougey, M

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US2004/039361

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 828 582 A (CONKLEN ET AL) 27 October 1998 (1998-10-27) column 5, line 10 - line 19 -----	10,23
Y	DE 100 45 272 A1 (HEATEC THERMOTECHNIK GMBH) 28 March 2002 (2002-03-28) paragraph '0038! -----	13
A	DE 198 54 035 A1 (JOH. VAILLANT GMBH U. CO, 42859 REMSCHEID, DE) 27 May 1999 (1999-05-27) the whole document -----	1,7,9, 10,15, 17-20,22
A	PATENT ABSTRACTS OF JAPAN vol. 008, no. 100 (M-295), 11 May 1984 (1984-05-11) & JP 59 013821 A (MITSUBISHI DENKI KK), 24 January 1984 (1984-01-24) abstract -----	1,2,4
A	WO 03/019711 A (BALLARD POWER SYSTEMS AG; SCHONERT, MICHAEL) 6 March 2003 (2003-03-06) page 1, paragraph 3 page 3, paragraph 2 page 5, paragraph 3 - page 6, paragraph 1 -----	1,17
A	US 2002/056316 A1 (TACHIARA TAKAHIRO ET AL) 16 May 2002 (2002-05-16) paragraph '0037! - paragraph '0048! -----	1,17
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 12, 3 January 2001 (2001-01-03) & JP 2000 240938 A (MATSUSHITA ELECTRIC WORKS LTD), 8 September 2000 (2000-09-08) abstract -----	1,17

INTERNATIONAL SEARCH REPORT

Information on patent family members

National Application No
PCT/US2004/039361

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0380705	A	08-08-1990	JP 1969319 C	18-09-1995
			JP 2044121 A	14-02-1990
			JP 6103092 B	14-12-1994
			DE 68925890 D1	11-04-1996
			DE 68925890 T2	31-10-1996
			EP 0380705 A1	08-08-1990
			WO 9001656 A1	22-02-1990
			KR 9511463 B1	04-10-1995
			US 5158448 A	27-10-1992
US 2002081470	A1	27-06-2002	JP 2002198073 A	12-07-2002
EP 0697564	A	21-02-1996	DE 4428953 A1	22-02-1996
			DE 59503838 D1	12-11-1998
			EP 0697564 A1	21-02-1996
US 5828582	A	27-10-1998	DE 19812955 A1	01-10-1998
			JP 10306286 A	17-11-1998
DE 10045272	A1	28-03-2002	NONE	
DE 19854035	A1	27-05-1999	AT 406900 B	25-10-2000
			AT 50398 A	15-02-2000
JP 59013821	A	24-01-1984	NONE	
WO 03019711	A	06-03-2003	DE 10141776 A1	06-03-2003
			WO 03019711 A2	06-03-2003
			US 2005037302 A1	17-02-2005
US 2002056316	A1	16-05-2002	JP 3398862 B2	21-04-2003
			JP 2002022160 A	23-01-2002
JP 2000240938	A	08-09-2000	NONE	